Federal Aviation Administration
FY-2001 Executive Summary

The Federal Aviation Administration's (FAA's) strategic goals to increase the safety, security, and efficiency of the National Airspace System (NAS) depend on effective management of the agency's information technology (IT) resources. Management of these resources requires a comprehensive and up-to-date inventory of computer and telecommunications systems used throughout the agency. The FAA's IT 5-Year Plan provides such an inventory. This plan has evolved over the years into a "web-enabled" data base with a site on the Internet, providing specific information about each IT system to include: name and description of system, points of contact, budget, and other program information.

Consistent with the Clinger-Cohen Act, IT is broadly defined as "… any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency…"

Consequently, this IT 5-Year Plan data base inventory includes several hundred systems. Some of these systems are used to support the agency's mission (e.g., the Wide Area Augmentation System, Display System Replacement, and other major systems). Some systems support the system of interconnected desk-top computers, wide-area networks, local-area networks, desktops, e-mail systems, and other systems that support the agency's operational infrastructure (e.g., Integrated Personnel and Payroll System, ACQUIRE, and other administrative support systems).

Of these systems, the FAA has identified 16 major and/or mission critical systems constituting a major portion of the agency's budget and commitment. These 16 major systems are listed in the table on the subsequent pages with their significant accomplishments for fiscal year 2000 and their goals for fiscal year 2001 and beyond. In addition, the FAA Information Systems Security Program is included as it is a major cross-cutting program that impacts all systems.

Dramatic growth in air traffic, increased collaboration between airspace users and the FAA, and new technologies increase the importance and difficulty of providing reliable, timely, secure information to agency users and staff. The infrastructure to enable such large-scale information distribution is being implemented over the next several years.

The FAA spends approximately $2 billion annually on IT and services such as NAS automation, voice and data communications, desktop computers, and database management systems. By standardizing what it buys, leveraging its position with vendors, purchasing and operating related IT services, creating the right management incentives, and adhering to and advancing an agency-wide IT architecture, the agency will significantly improve the cost-effectiveness of IT. The following table summarizes the recent accomplishments and future objectives of the FAA's major IT systems and programs.

Project/Program	FY-00 Accomplishments	FY-01 & Beyond Objectives
AFSS Voice Switch	**Automated Flight Service Station Voice Switch:** • Completed and signed Final Requirements Document – 5/00 • Investment Analysis completed and JRC Decision – 5/00 • Final Acquisition Strategy Paper (ASP) issued to CNS IMT review and approval – 9/00 • Briefed CNS IMT on ASP – 5/00 • Briefed Aircraft Owners and Pilots Association (AOPA) on program – 8/00 • Issued Integrated Program Plan (IPP) for review and final comments—9/00 • Final IPP for CNS IMT review and approval 9/00.	• Brief CNS IMT on IPP -- Oct/00 • Draft Screening for Information Request (SIR) out to industry review and comments -- Nov/00 • Final SIR -- Feb/01 • Document being developed: Specs • Documents to be developed: SOW, IRDS, TEMP, PIP.
ACTBI-R	**Air Traffic Control Beacon Interrogator - Replacement:** • Completed 1st article test. • Delivered key site system	• Delivery/installation of 6 ATCBI-6 production systems
DSR	**Display System Replacement:** • Government acceptance at final site completed by 11/99 • Completed initial site VEM/PEM reconfiguration by 01/00 • Operational Readiness Demonstration (ORD) at final site achieved 5/00	• In-Service phase of lifecycle • Planning technology refresh options • Air Traffic DSR Evolution Team working to prioritize integration of additional improvements
FFP-1	**Free Flight Phase 1:** • Completed deployment of SMA 12/21/99 • pFAST fully operational at DFW 2/00 • TMA fully operational at ZFW 2/00 • Achieved initial daily use of TMA: ➢ Minneapolis 6/00 (9 days early) ➢ Denver 9/00 (24 days early) • CDM - Provided Military Special Use Airway Status via the Internet 6/00 • URET prototypes in daily operation at Memphis and Indianapolis ARTCC's • Completed Build 1 for URET 8/00	• Continue deployment of TMA, pFAST, CDM, and URET
FTI	**FAA Telecommunications Infrastructure:** • Product Team Charter approved 4/19/00 • Acquisition Strategy Paper approved 6/19/00 • Integrated Program Plan approved 6/19/00 • Screening Information Request (SIR) released 7/28/00 • Source Evaluation Plan approved by Source Selection Official	• Evaluate vendor proposals • Conduct capability validation of vendor services. • Award FTI contract. • Conduct planning for the transition of existing FAA Telecommunications systems and services to FTI • Award a Leased Interfacility NAS Communications System (LINCS) bridge contract to reduce programmatic risk

LAAS	**Local Area Augmentation System:** • Concept of Operations completed 12/99 • Flight Inspection Flight Mgmt System Certification initiated for LAAS and WAAS 2/00 • Prototype ground facility installed at the University of Oklahoma 5/00 • Draft TERP's criteria completed 7/00	• Revise LAAS Acquisition Strategy to Transition from Government Industry Partnership (GIP) Contract to FAA Procurement • CAT II/III Spec Development and Validation • CAT II/III MOPS Development and Validation
HOCSR	**Host Oceanic Computer System Replacement:** • Phase 2 En Route national release completed 12/99; keysite testing completed 2/00; En Route in-service decision occurred 4/00; 18 of 20 sites expected operational by 9/00 • Phase 2 Oceanic delayed by Y2K moratorium, Honolulu Control Facility support, & personnel support to ATOP-Phase 2 Oceanic national release now expected in FY01 • Delivered equipment to Honolulu Control Facility (new CERAP) & supported site testing in 6/00	• Final two En Route sites go operational on Phase 2 software by 12/00 • Phase 2 Oceanic national release expected by 01/01, with full-time daily use expected by 03/01 • Deliver Phase 3 equipment to WJHTC by 3/01; & complete Phase 3 system acceptance at WJHTC by 9/01 • Continue planning for Phase 4
STARS	**Standard Terminal Automation Replacement System:** • Early Display Configuration (EDC) - EDC Sensitive Application Certification approved (9/99). - Achieved Initial Operating Capability (IOC) at key sites El Paso, Texas (12/99) and Syracuse, New York (1/00). - Installed and tested two Life Cycle Maintenance Builds (upgraded software) for EDC-1 (2/00, 6/00) now operational at key site, El Paso. Installation and testing of third Life Cycle Maintenance Build scheduled for end of September. - System Acceptance Test (SAT) started for EDC-2 (8/00). • DoD first full service system (with minimal computer human interface (CHI) enhancements - Multi-service Operational Test & Evaluation (MOT&E) Phase 1 at Eglin AFB development test/operational test (DT/OT) (12/99). - MOT&E Phase 2 at Eglin AFB (6/00).	• EDC - EDC-1 installation and testing of third Life Cycle Maintenance Build at Syracuse scheduled for October. - EDC-2 Initial Operations IOC (2/01). • DoD - Milestone III, Full Rate Production (FRP), decision (2/01). - Initial System Capability (ISC) upgrade at Eglin (3/01). - (IOC) at McGuire (9/01). • FAA full service system (with CHI) - FS-1 SAT Test Readiness Review (TRR) (2/01). - FS-1 Beta Site Operational (3/01). - FS-2 SAT TRR (7/01). • Option 8R, Phase 2 Award (12/00) (limited production)

	- Began initial operations at Eglin Air Force Base (AFB) (6/00). - Received DoD Low Rate Initial Production (LRIP) Decision (1/00). • FAA full service system (with CHI) - Completed Full STARS (FS)-1 Software Development. • ESC-1 Proposal, Pre-planned Product Improvement (P3I) • Option 8R, Phase I, Award (4/00) • Option 8R, Phase II, Draft RFP (8/00)	
OASIS	**Operational And Supportability Implementation System:** • Program re-baseline approved by JRC 03/00. (FY 2000 Appropriations less than requested.) • Console Replacement at Miami AFSS Completed by 09/00. • Seattle AFSS Operational with IOC System by 09/00.	• In-Service Decision by 06/02 • First ORD by 07/02. • Last delivery scheduled for 03/05. • Last ORD by 05/05.
CPDLC	**Controller Pilot Data Link Communications:** • Award contract for 2nd phase (Build 1A) 2/00 • Ground-to-ground router software design completed 3/00 • Build 1A operational requirements identified 8/00 • Build 1 CDR completed 9/00	• End-to-end human factors test and evaluation to be conducted 12/00 • Initial Operational Capability for Build 1 6/02 • Initial Operational Capability for Build 1A 6/03
TRDRE (ASR-11)	**Terminal Radar Digitizing, Replacement, and Establishment:** • Developmental Test and Evaluation completed at Stockton, CA (FAA Key Site), December 1999. • On March 14, 2000, the JRC approved ASR-11 APB milestones through IOT&E. • The pre-Operational Test and Evaluation (OT&E) configuration audit was completed at Stockton, CA on June 29, 2000. • The Stockton operational inventory with NATCA and PASS was completed on June 29, 2000. There were no showstoppers for the production decision or entry into the formal Operational Test (OT) performance test events. • The Production Decision was made on July 27, 2000. • FAA Implementation Process: - 21 Site Surveys Completed. - 17 Site Surveys Underway.	• Nine FAA Production Systems are planned for procurement in FY 01. • Complete Operational Test and Evaluation. • FAA Implementation Process: - 18 Site Surveys Planned. - 24 Site Designs Planned.

OAP	**Oceanic Automation Program:** • Build 1 Delivery Completed 9/99 • OAS/OSDS Certified Y2K Compliant 6/99 • HOCSR Phase I installed and ORD at all Oceanic Sites 9/99 • First phase of ZHN consolidation (Honolulu TRACON controllers begin using Micro-EARTS) 5/99 • Capstone Demonstration (ADS-B targets displayed on ZAN Micro-EARTS) 5/99	• ATOP Acquisition Initiated 12/99 • First Level Operational Test Completed (Contractor's sites) 12/00 • IPP completed 4/01 • Contract awarded 6/01 • System deployed to key site
NEXCOM	**Next Generation VHF Air/Ground Communications:** • IPP Scheduled for 2/00. • Request for Information (RFI) #1 - #6 released to industry (8/99 - 6/00). • MDR Operational Capability Demonstrations completed 7/00.	• Final SIR release scheduled for 10/00. • Contract award scheduled for 7/01. • First commissioning (Analog Voice) scheduled for 11/02. • Last commissioning (Digital Voice) scheduled for9/10.
WAAS	**Wide Area Augmentation System:** • WAAS Satellite lease vs buy study completed 12/99 • 21-day stability test completed 6/00 • Phase 1 human factors assessment completed 7/00 • First meeting with Independent Review Board (IRB) to review WIPP products held 8/00 • Press release issued to announce immediate availability of WAAS capability for a broad range of non-safety applications (aviation and non-aviation) 8/00	– Complete WAAS Lateral Navigation/Vertical Navigation (LNAV/VNAV) Technical Solution, including Algorithm Description Documents (ADD) – Effect a Definitized WAAS Contract Schedule Modification for LNAV/VNAV – Roadmap to GNSS Landing System (GLS) Capability (ILS-Equivalent)
WARP	**Weather And Radar Processor:** • Achieved phase 1 IOC at Fort Worth Center on 8/30/00	• Achieve phase 2 ORD in August, 2001 • The Last ORD for WARP is now June 2002.
ITWS	**Integrated Terminal Weather System:** • Factory Qualification Testing Test Readiness Review (FQT TRR) completed 7/00. • Factory Acceptance Testing Test Readiness Review (FAT TRR) completed 8/00.	• Last FA SAT scheduled for 2/0. • First ORD scheduled for 3/02. • Last ORD scheduled for 7/03.
Information Systems Security Program	**Information Systems Security Program** • Established Office of Information Systems Security (AIS) • Published AIS Business Plan, ISS Program Plan, and ISS Handbook • Published FAA ISS Policy (1370.82) • Released Version 1.0 ISS Architecture • Completed SCAP Process on 12 PDD-63 Critical Systems • Completed IOC on 34 PDD-63 Critical Systems • Established Permanent CSIRC Location	• Establish a Fully Operational CSIRC (9/01) • Complete ISS Assessment and Planning for All PDD-63 Critical Systems (9/01) • Complete C&A Process for a Total of 53 PDD-63 Critical Systems (9/01) • Complete the Implementation of an Integrated Facility Clearance (IFC) Prototype (9/01) • Complete Security Awareness Training for All New FAA Employees and Contractors (9/01)

	• Completed Security Training for 60% of the System Administrators • Completed Security Awareness Training for All FAA Employees • Completed FAA Remediation Plan in Compliance with PDD-63	• Complete Security Awareness Refresher Training for 1/3 of FAA Employees and Contractors (9/01) • Complete ISS Remediation for All PDD-63 Critical Systems (5/03)
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